

CLAIMS:

1. A light source unit, for supplying light via a light guide to a remote location, comprising a support for supporting a light source and a light guide in a prescribed alignment relative to each other, the support comprising a first part for supporting the light source, a second part for supporting the light guide, and at least first and second light baffles between the first part and the second part, the first and second baffles each having an aperture for passing only a portion of light from the light source incident upon the baffle, the arrangement being such that light from the light source must pass through the apertures in both baffles to be incident upon the light guide.
2. A light source unit according to claim 1, for supplying light to a said light guide having at least one ferrule for coupling to the light source unit, wherein the baffles are dimensioned and positioned so as to substantially avoid light from the source being incident upon the ferrule.
3. A light source unit according to claim 2, wherein the aperture in the baffle that is closer to the first part of the support is slightly larger than the aperture in the baffle that is further from the first part of the support.
4. A light source unit according to claim 3, wherein the first baffle comprises a truncating end wall of a conical baffle member having a mouth portion, a mounting being provided at the mouth portion for mounting the light source so as to direct light into the conical baffle member.
5. A light source unit according to claim 1, wherein the baffles, first part and second part are integral parts of the support and are made of material having a high thermal conductivity, and a fan is provided for directing cooling air onto both the support and the light source.

6. A light source unit according to claim 5, further comprising a duct for directing cooling air across a major surface of the support.
7. A light source unit according to claim 5, wherein the light source unit has a housing partitioned to provide a compartment enclosing the light source, support and light guide holder, and the fan is positioned outside the compartment to direct cooling air onto the light source via an opening in a wall of the compartment.
8. A light source unit according to claim 6, wherein the light source unit has a housing partitioned to provide a compartment enclosing the light source, support and light guide holder, and the fan is positioned outside the compartment to direct cooling air onto the light source via an opening in a wall of the compartment.
9. A light source unit according to claim 1, further comprising a plate mounted between the first and second apertures and having a plurality of apertures of different sizes, the plate being pivotally mounted for interposing the plurality of apertures selectively between the first and second apertures, at least one of the apertures being having a size such that, when interposed, it restricts light to such an extent that the second aperture is substantially ineffective.
10. A light source unit for use with a replaceable lamp unit comprising an elliptical reflector having a ceramic mounting ring attached to its rim, the ceramic mounting ring having frontal fiduciary surfaces precisely positioned longitudinally relative to a point light source of the lamp unit, and transverse fiduciary surfaces precisely positioned laterally relative to the point light source, wherein the light source unit comprises a lamp support having a reference surface to receive the ceramic mounting ring so that the ring extends around an opening in the lamp support surface, a pair of guide rails disposed one on each side of the opening, and stops protruding axially from the reference surface between the guide rails at one end thereof, the stops being spaced apart and oriented so as to mate with a pair of the transverse fiduciary locating surfaces of the lamp, the guide rails being spaced from the reference surface so as to

engage opposite sides of the ceramic ring of a lamp being inserted laterally therebetween but to provide clearance once the lamp has been fully inserted, the light source unit further comprising clamping means engageable once the lamp has been fully inserted, to urge the lamp longitudinally to force its frontal fiduciary locating surfaces into contact with the reference
5 surface and to urge the lamp laterally to force a pair of the transverse fiduciary locating surfaces against the stops.

11. A light source unit according to claim 10, wherein the frontal fiduciary surfaces each extend around a part only of the ceramic ring,

10

12. A light source unit according to claim 10, wherein the clamping means comprises a first spring clamp hingedly mounted to one side of the support reference surface and pivotal between an open position allowing insertion of a leading edge of the lamp ceramic ring between the guide rails and a closed position in which the clamp engages a trailing edge of the
15 ceramic ring.

13. A light source unit according to claim 12, wherein the clamping means further comprises a generally U-shaped spring mounted to an opposite side of the support reference surface and spaced therefrom so as to protrude generally parallel to the reference surface and
20 engage an outer surface of the reflector to urge the lamp towards the reference surface.